

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 21-36 and 38-40 are currently pending. Claim 37 has been canceled without prejudice or disclaimer; and Claims 21, 24, and 29 have been amended by the present amendment. The changes to the claims are supported by the originally filed specification and do not add new matter.¹

In the outstanding Office Action, Claims 21-39 were rejected under 35 U.S.C. §112, second paragraph, for failing to particularly point out the subject matter which Applicants regard as the invention; Claims 21-29 and 32-40 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,400,582 to Shaheen et al. (hereinafter, “Shaheen”); and Claims 30 and 31 were rejected under 35 U.S.C. §103(a) as being unpatentable over Shaheen in view of U.S. Patent No. 6,574,335 to Kalmanek, Jr. et al. (hereinafter, “Kalmanek”).

Regarding the rejections of Claims 21-39 under 35 U.S.C. §112, second paragraph, Claim 21 has been amended to recite “a reserved connection” instead of “the reserved connection;” Claim 24 has been amended to recite “an associated flow of the bidirectional connection;” and Claim 29 has been amended to depend from Claim 26 instead of independent Claim 21. Further, it is respectfully submitted that the recitation of “resource information elements” in line 3 of Claim 26 provides the antecedent basis for “the resource information element” recited in Claims 27 and 28. Accordingly, the rejections of Claims 21-39 under 35 U.S.C. §112, second paragraph, have been overcome.

Amended Claim 21 is directed to a quality-of-service reservation method for managing network resources and/or service parameters needed for symmetric real-time

¹ See, e.g., page 22, lines 33-34 of Applicants’ specification.

multimedia applications and/or data services running on a mobile node and a correspondent node by signaling resource control information along specific routing paths between the nodes, the method comprising:

embedding resource control information to be transmitted between the mobile node and the correspondent node in a message which is sent via the routing path of a reserved connection for the nodes;

disseminating resource control information between the mobile node and the correspondent node by using the same routing path through the network in both directions; and

setting those attribute values carried in an IP datagram header to zero which permit reservation end points to interpret the situation of routing asymmetry if upstream and downstream paths for a bidirectional reservation do not follow identical routes at a specific routing node along the reserved routing path.

Claim 21 has been amended to clarify the step of setting those attribute values to zero which permit reservation end points to interpret the situation of routing asymmetry if upstream and downstream paths for *a bidirectional reservation do not follow identical routes* at a specific routing node along the reserved routing path.

The Office Action associates the above claimed feature with the reverse direction RSVP PATH message (46) containing resource allocation information for user B's transmissions to A, as illustrated in Fig. 4 of Shaheen.²

Shaheen describes that messages transmitted between users (User A and User B) have IP headers including a four bit direction header (54).³ Shaheen also describes that the four bits of the direction header (54) are assigned a value of "0000" for a forward direction, that is, *only* when an originating user sends information.⁴ Further, Shaheen describes that the four bits of the direction header (54) are assigned a value of "1111" when both directions are used, that is, when the originating user sends and receives information. Therefore, in Shaheen,

² See Office Action dated February 20, 2009, page 9.

³ See Shaheen, column 4, lines 1-8.

⁴ Id. at column 4, lines 9-11.

setting the four bits of the direction header (54) to zero (“0000”) does **not** permit each network to allocate resources for a bidirectional allocation.

Therefore, for this reason alone, Shaheen does not anticipate the claimed invention.

Further, Shaheen describes that Fig. 4 is an illustration of reverse resource reservation setup protocol, in which User A sets up an Internet session where **only** user B transmits information.⁵ That is, in the reverse resource reservation setup illustrated in Fig. 4 of Shaheen, User A does **not** transmit any information to User B. Therefore, this reverse resource allocation is **not** directed to a bidirectional allocation.

Furthermore, regarding the claimed upstream and downstream paths **not following identical routes**, Shaheen describes that upon transferring a bi-directional RSVP RESV message (40), resources for both User A’s and User B’s transmissions are allocated.⁶ That is, in Shaheen, each node that receives this message will reserve resources for transmissions in both directions, and transmissions from User A and transmissions from User B **will follow identical paths**. Therefore, asymmetry in routing and a bidirectional reservation that follows different routes for each transmission direction is not disclosed or suggested by Shaheen.

Thus, Shaheen does not disclose or suggest the setting of those attribute values to zero which permit reservation end points to interpret the situation of routing asymmetry if upstream and downstream paths for **a bidirectional reservation do not follow identical routes** at a specific routing node along the reserved routing path, as recited in Claim 21.

For these additional reasons, Shaheen does not anticipate the claimed invention.

Accordingly, it is respectfully submitted that independent Claim 21 patentably defines over Shaheen. Further, for the reasons discussed above regarding the patentability of

⁵ See Shaheen, column 3, lines 48-50.

⁶ See Shaheen, column 3, lines 18-20.

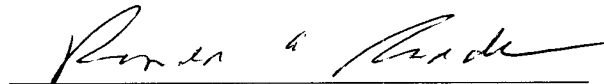
independent Claim 21 over Shaheen, it is respectfully submitted that dependent Claims 22-29, 32-36, 38, and 39, which directly or indirectly depend from independent Claim 21, patentably define over Shaheen.

Regarding the rejections of Claims 30 and 31 under 35 U.S.C § 103(a), it is respectfully submitted that Kalmanek fails to remedy the deficiencies of Shaheen discussed above. Accordingly, it is respectfully submitted that dependent Claims 30 and 31 patentably define over any combination of Shaheen and Kalmanek.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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